

# National On-Farm Energy Initiative

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Tim Garcia, Resource Conservationist Programs Section





# **Policy**

Food Conservation and Energy Act of 2008, Title II, and the Agricultural Act of 2014 (Farm Bill), Title II

"Provides authority for use of EQIP to specifically address energy conservation through practice implementation and for development of Agricultural Energy Management Plan (Audit)"





# Purpose

Program is designed to:

- Identify ways to conserve energy on Farms through an <u>on-farm energy audit</u>.
- 2) Provide assistance to implement various recommended measures addressed in an <u>existing</u> <u>on-farm energy audit.</u>





# **Energy Audit Requirements**

- Energy Audits must meet ASABE (American Society of Agriculture and Biological Engineers)
   Type II Standard
- Existing energy audits must be less than 4 years old
- Energy Conservation Activity Plans (CAP) must be developed by a certified Technical Service Provider (TSP) from TechReg.





## **Program Eligibility**

- Must meet the eligibility requirements in 440-CMP, Part 515, Subpart F, section 515.51 (A)
- Eligible land uses are:
  - Cropland
  - Pastureland
  - Rangeland
  - Farmstead
- No annual payment limitation
- \$450,000 regular EQIP payment limitation applies







# Eligible Practices

Core Practices

Supporting Practices





### **Core Practices**

Conservation Activity Plans (CAP)

- 122 Agricultural Energy
   Management Plan Headquarters
- 124 Agricultural Energy
   Management Plan Landscape





# **Core Practices (Continued)**

- Farmstead Energy Improvement 374
- Irrigation Water Management 449
- Pumping Plant 533
- Lighting System Improvement 670
- Building Envelope Improvement 672





# Supportive Practices

- •328 Conservation Crop Rotation
- o340 Cover Crop
- 345 Residue and Tillage Management, Mulch Till
- 346 Residue and Tillage Management,
   Ridge Till
- 380 Windbreak and Shelterbelt Establishment





### Resource Concerns

 Inefficient Energy Use – Equipment and Facilities Energy

Inefficient Energy Use –
 Farming/Ranching Practices and Field
 Operations





## **Application Process**

- •Screening
- Ranking
- Application Management
- Calculating Energy Benefit





## Screening

NRCS Environmental Quality Incentives Program (EQIP)
National On-Farm Energy Initiative
NATIONAL SCREENING CRITERIA WORKSHEET - Fiscal Year 2014
A Screening Worksheet must be completed for each eligible EQIP application.

The priority determination of high, medium, or low must be recorded in ProTracts for this applicant.

#### Instructions:

Applicant Name:

This screening worksheet must be completed for each eligible producer applying for EQIP On-Farm Energy Initiative assistance. Applications will be accepted on a continuous basis; however, application periods are established for purposes of evaluation, ranking, and funding decisions.

Completion of this worksheet and documentation does not constitute agreement to provide EQIP program benefits nor approval of a program contract. The original screening worksheet should be filed with the applicant case file or EQIP program file and unless the application is determined to be ineligible, the screening priority (high, medium, and low) must be recorded in ProTracts. Upon request, a copy of any completed screening worksheet may be provided to the applicant.

Detailed Screening Criteria Worksheet - Complete for each eligible EQIP Applicant

#### Application No: Field Office: (OPTIONAL) Evaluator Name: Date: Priority Determination for ProTracts - Select One: **High Priority Category:** The application is for an Agricultural Energy Management Plan (122 or 124); **High Priority** Status in ProTracts The application includes at least 1 Core conservation practice (374, 449, 533, 670, or 672) necessary to implement the recommendations identified in a completed Agricultural Energy Management Plan (122 or 124) or comprehensive on-farm energy audit meeting ASABE S612 Type 2 standard. **Medium Priority Category:** The application includes 0 "Core" conservation practices but does include at least 1 "Supporting" **Medium Priority** conservation practice necessary to implement the recommendations identified in a previously completed Status in ProTracts Agricultural Energy Management Plan (122 or 124) or comprehensive on-farm energy audit meeting ASABE S612 Type 2 standard. **Low Priority Category:** Low Priority Applications will not be ranked. Low Priority Status in ProTracts All other applications



County:



### Screening

### **High Priority Category:**

- The application is for an Agricultural Energy Management Plan (AgEMP) (122 or 124); or
- The application includes at least 1 Core conservation practice (374, 449, 533, 670, or 672) necessary to implement the recommendations identified in a completed AgEMP (122 or 124) or comprehensive on-farm energy audit meeting ASABE S612 Type 2 standard.

### **Medium Priority Category:**

 The application includes no "Core" conservation practices but does include at least 1 "Supporting" conservation practice necessary to implement the recommendations identified in a previously completed AgEMP (122 or 124) or comprehensive on-farm energy audit meeting ASABE \$612
 Type 2 standard

### **Low Priority Category:**

Low Priority Applications will not be ranked.





# Ranking

National, State, and Local criteria have this question:

2014 EQIP NOFEI State Level Ranking Criteria	FY 2014 Points
<ol> <li>If the application is for the development of a Conservation Activity Plan (CAP), the agency will assign significant ranking priority and conservation benefit by answering "Yes" to the following question. Answering "Yes" to question 1a will result in the application being awarded the maximum amount of points that can be earned for the state level questions.</li> </ol>	
1a. Is the program application for development of a Conservation Activity Plan (CAP) for a TSP prepared Agricultural Energy Management Plan (122 or 124)? If answer is "Yes", do not answer any other state level questions. If answer is "No", proceed with evaluation to address the remaining questions in this section.	400

State question examples reflect installation from an existing AgEMP:

2.	Answer the following question regarding the producer's efforts to understand and improve existing energy conservation systems in their farming operation.	
	2a: Will the schedule of operation include practices that were recommendations made in an Agricultural Energy Management Plan (AgEMP) or an on-farm energy audit that meets the ASABE S612 Performing On-Farm Energy Audits Comprehensive Type 2 standards, which has been completed or updated in the last four years?	100
3.	Select all categories of major energy efficiency activities that have been <u>installed</u> <u>within the last four years</u> by the applicant to address inefficient use of energy in their farming operation.	
	3a: LIGHTING components (lamps, timers, sensors)	10
	3b: VENTILATION components (fans, control systems, humidity control)	10
	3c: REFRIGERATION components (compressor, evaporator/chiller, motor, insulation)	10
	3d: MILK HARVESTING components (pumps, motors, controllers)	10
	3e: ELECTRONIC CONTROLLER components (master system automation)	10
	3f: OTHER MOTORS, VARIABLE FREQUENCY (SPEED) DRIVES components (compressors)	10
	3g: AIR HEATING/BUILDING ENVIRONMENT components (heater, insulation, recovery)	10
	3h: DRYING components (air flow, handling equipment)	10
	3i: WASTE HANDLING components (collection and dispersal equipment/methods)	10
	3j: AIR COOLING (airflow, control systems, evaporative)	10





# **Application Management**

•Funds to support the Energy Initiative will be held at the State Office.

•All <u>eligible</u> applications will be ranked and set to pre- approved by the end of the application ranking period.





# **Calculating Energy Benefit**

• An Energy Benefits button at the contract item level documents which practices were specifically providing energy impacts in a contract.

Energy Benefits 

Yes 
No

 This helps validate that Energy was a resource concern and helps the ranking of the application.





## Calculating Energy Benefit



- When the ranked data is saved from AERT,
   ProTracts will detect if energy is one of the concerns and provide users information messages.
  - All conservation practices offered in the NOFEI have an energy benefit.
  - The energy button MUST be selected for at least one contracted Item.
  - The estimated energy savings data for the contracted practice(s) MUST be recorded.





# **Calculating Energy Benefit**

 After selecting "yes" in the energy benefit box the user must enter numeric values for the estimated energy savings.
 This is obtained from a completed on-farm energy audit.





💪 Energy Savings - Windows Internet Ex 🔲 🗆 🗙
Save Close
Energy Savings mBTU:
Values in Pounds:
□ CO2 □
□ N2O □
□ CH4
□ SO2 □
□NOx
Values up to three decimal place precision should be entered from a completed on-farm energy audit.





- Energy Estimator: Tillage
- Nitrogen Fertilizer Awareness Tool
- Energy Estimator: Irrigation
- Energy Estimator: Animal Housing



http://ecat.sc.egov.usda.gov



http://nfat.sc.egov.usda.gov



http://ipat.sc.egov.usda.gov



http://ahat.sc.egov.usda.gov





### Questions?

Dennis Kimberlin Assistant State Conservationist – Programs dennis.kimberlin@az.usda.gov (602) 280-8800

Tim Garcia Resource Conservationist – Programs Staff timothy.garcia@az.usda.gov (602) 280-8823





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